

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) ~~An intelligent policy server~~ A method in an Asynchronous Transfer Mode (ATM) network ~~having~~ including an ingress switch and an egress switch, ~~wherein~~ where said ingress switch serves an ingress device operated by a calling party and said egress switch serves an egress device operated by a called party, the method comprising the steps of:

receiving, in said ingress switch, a signaling message from said ingress device;

providing said signaling message to a signaling intercept processor associated with said ingress switch;

propagating said signaling message from the signaling intercept processor to a policy server, said policy server being associated with a policy profile database, the policy profile database storing entries that relate subscribers to policies, where each policy identifies one or more policy features, including at least one policy profile associated with of a plurality group of policy features, each policy profile of the at least one policy profile being associated with a subscriber with which the related subscriber is associated;

identifying, in the policy profile database and based on the signaling message, a policy for the calling party;

determining, in the policy server and based on the signaling message, that the policy for the calling party is to be enforced;

determining ~~executing~~, in said policy server[[.]] and based at least in part on said signaling message, if a particular policy feature of the plurality of policy features is to be invoked appropriate service logic for each policy feature of the one or more policy features identified by the policy for the calling party;

if so, determining whether a policy condition associated with said particular ~~each~~ policy feature, of the one or more policy features identified by the policy for the calling party, is satisfied with respect to said signaling message; and

establishing a connection path between said ingress switch and said egress switch based on said determination that said policy condition is satisfied by said signaling message for each policy feature, of the one or more policy features identified by the policy for the calling party.

2. (currently amended) The ~~intelligent policy server~~ method in an ATM network as set forth in claim 1, ~~wherein~~ where said signaling message comprises a Connect message.

3. (currently amended) The ~~intelligent policy server~~ method in an ATM network as set forth in claim 1, ~~wherein~~ where said signaling message comprises an Add Party message.

4. (currently amended) The ~~intelligent-policy-server~~ method in an ATM network as set forth in claim 1, ~~wherein~~ where said signaling message comprises a Release message.

5. (currently amended) The ~~intelligent-policy-server~~ method in an ATM network as set forth in claim 1, ~~wherein~~ where said signaling message comprises a Setup message.

6. (currently amended) The ~~intelligent-policy-server~~ method in an ATM network as set forth in claim 5, ~~wherein~~ where said ~~particular one or more policy feature features, identified by the policy for the calling party,~~ comprises a source address validation feature, and

where the determining whether a policy condition associated with each policy feature is satisfied comprises:

determining whether an address associated with the calling party is within a range of authorized addresses, and

determining that the condition is satisfied for the source address validation feature when the address, associated with the calling party, is determined to be within the range of authorized addresses.

7. (currently amended) The ~~intelligent-policy-server~~ method in an ATM network as set forth in claim 5, ~~wherein~~ where said ~~particular one or more policy feature~~

features, identified by the policy for the calling party, comprises a maximum call attempt rate limit feature, and

where the determining whether a policy condition associated with each policy feature is satisfied comprises:

determining whether the signaling message results in a maximum call frequency rate for a customer logical port with which the calling party is associated, and

determining that the condition is satisfied for the maximum call attempt rate limit feature when the signaling message does not result in the maximum call frequency rate for the customer logical port with which the calling party is associated.

8. (currently amended) The ~~intelligent policy server~~ method in an ATM network as set forth in claim 5, ~~wherein~~ where said ~~particular one or more~~ policy feature features, identified by the policy for the calling party, comprises a destination address screening feature, and

where the determining whether a policy condition associated with each policy feature is satisfied comprises:

determining whether an address associated with the called party is within a list of address ranges to which the calling party is allowed to call, and

determining that the condition is satisfied for the destination address screening feature when the address, associated with the called party, is

determined to be within the list of address ranges to which the calling party is allowed to call.

9. (currently amended) The ~~intelligent-policy-server~~ method in an ATM network as set forth in claim 5, ~~wherein said particular policy feature~~ where the method further comprises:

identifying a policy for the called party, the policy for the called party including a source address screening feature;

determining that the policy for the called party is to be enforced;

determining whether a policy condition associated with the source address screening feature is satisfied with respect to the signaling message, the determining whether the policy condition association with the source address screening feature is satisfied includes:

determining whether an address associated with the calling party is within a list of address ranges from which the called party is allowed to receive calls; and

determining that the condition is satisfied for the source address screening feature when the address, associated with the calling party, is determined to be within the list of address ranges from which the called party is allowed to receive calls, and

where the establishing the connection path is based on whether the condition is satisfied for the source address screening feature.

10. (currently amended) The ~~intelligent-policy server~~ method in an ATM network as set forth in claim 5, ~~wherein~~ where said ~~particular one or more~~ policy feature features, identified by the policy for the calling party, comprises a maximum burst size limit feature, and

where the determining whether a policy condition associated with each policy feature is satisfied comprises:

determining whether a burst size in the signaling message exceeds a limit, and

determining that the condition is satisfied for the maximum burst size limit feature when the burst size does not exceed the limit.

11. (currently amended) The ~~intelligent-policy server~~ method in an ATM network as set forth in claim 5, ~~wherein~~ where said ~~particular one or more~~ policy feature features, identified by the policy for the calling party, comprises an aggregate bandwidth limit feature, and

where the determining whether a policy condition associated with each policy feature is satisfied comprises:

calculating bandwidth for the signaling message,

determining whether calculated bandwidth exceeds a requested bandwidth, and

determining that the condition is satisfied for the aggregate bandwidth limit feature when the calculated bandwidth is determined to not exceed the requested bandwidth.

12. (currently amended) The ~~intelligent-policy-server~~ method in an ATM network as set forth in claim 5, ~~wherein~~ where said ~~particular one or more~~ policy feature features, identified by the policy for the calling party, comprises a service class selection feature, and

where the determining whether a policy condition associated with each policy feature is satisfied comprises:

determining a requested class of service based on the signaling message,

determining whether the requested class of service is permitted for a customer logical port with which the calling party is associated; and

determining that the condition is satisfied for the service class selection feature when the requested class of service is permitted for the customer logical port with which the calling party is associated.

13. (currently amended) The ~~intelligent-policy-server~~ method in an ATM network as set forth in claim 5, ~~wherein~~ where said ~~particular one or more~~ policy feature features, identified by the policy for the calling party, comprises a maximum concurrent call limit feature, and

where the determining whether a policy condition associated with each policy feature is satisfied comprises:

determining whether a quantity of concurrent calls, if a call is established between the calling party and the called party, exceeds a maximum number of concurrent calls, and

determining that the condition is satisfied for the maximum concurrent call limit feature when the quantity of concurrent calls does not exceed the maximum number of concurrent calls.

14. (currently amended) An Asynchronous Transfer Mode (ATM) network for effectuating intelligent policy features with respect to a call to be established between ~~two parties via a virtual channel connection~~ a calling party and a called party, comprising:

an ATM switch serving a customer premises equipment (CPE) operated ~~by a party with respect to said call~~ the calling party;

a signaling intercept processor associated with said ATM switch, the signaling intercept processor to for intercepting ~~for intercepting~~ intercept a signaling message relative to said call; and

a policy server associated with said signaling intercept processor, said policy server being associated with a policy profile database, the policy profile database storing entries that relate subscribers to policies, where each policy identifies one or more policy features, including at least one policy profile associated with ~~of a plurality of~~

policy features, ~~the at least one policy profile being~~ with which the related subscriber is
associated ~~with a subscriber, wherein~~ where said policy server is to:

~~operates to effectuate a particular policy feature of the plurality of~~
~~policy features with respect to said call when triggered by said signaling message~~
~~received from said signaling intercept processor determine that a policy in the policy~~
profile database is to be enforced for the calling party,

execute appropriate service logic for each policy feature of the one
or more policy features identified by the policy for the calling party, and

determine whether a policy condition associated with each policy
feature, of the one or more policy features identified by the policy for the calling party, is
satisfied with respect to said signaling message, a connection path being established
when the policy condition for each policy feature, of the one or more policy features
identified by the policy for the calling party, is determined to be satisfied.

15. (currently amended) The ATM network for effectuating intelligent policy
features with respect to a call as set forth in claim 14, ~~wherein~~ where said signaling
message comprises a Connect message.

16. (currently amended) The ATM network for effectuating intelligent policy
features with respect to a call as set forth in claim 14, ~~wherein~~ where said signaling
message comprises an Add Party message.

17. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 14, ~~wherein~~ where said signaling message comprises a Release message.

18. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 14, ~~wherein~~ where said signaling message comprises a Setup message.

19. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 18, ~~wherein~~ where said particular one or more policy feature features, identified by the policy for the calling party, comprises a source address validation feature for ensuring that said party is an authorized party for accessing said ATM network through a particular network port associated with said CPE, and

where, when determining whether a policy condition associated with each policy feature is satisfied, the policy server is to:

determine whether an address associated with the calling party is within a range of authorized addresses, and

determine that the condition is satisfied for the source address validation feature when the address, associated with the calling party, is determined to be within the range of authorized addresses.

20. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 19, ~~wherein~~ where said particular network port is a Customer Logical Port.

21. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 19, ~~wherein~~ where said particular network port is a full physical port.

22. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 18, ~~wherein~~ where said particular one or more policy feature features, identified by the policy for the calling party, comprises a maximum call attempt rate limit feature for monitoring the number of Setup messages received from said calling party over a predetermined period of time, and
where, when determining whether a policy condition associated with each policy feature is satisfied, the policy server is to:

determine whether the signaling message results in a maximum call frequency rate for a customer logical port with which the calling party is associated,
and

determine that the condition is satisfied for the maximum call attempt rate limit feature when the signaling message does not result in the maximum call frequency rate for the customer logical port with which the calling party is associated.

23. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 18, ~~wherein~~ where said ~~particular one~~ or more policy feature features, identified by the policy for the calling party, comprises a destination address screening feature for defining a plurality of addresses to which said party can effectuate said call, and

where, when determining whether a policy condition associated with each policy feature is satisfied, the policy server is to:

determine whether an address associated with the called party is within the plurality of addresses, and

determining that the condition is satisfied for the destination address screening feature when the address, associated with the called party, is determined to be within the plurality of addresses.

24. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 23, ~~wherein~~ where said destination address screening feature is established for a group of subscribers to which said calling party belongs.

25. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 18, ~~wherein said particular policy feature comprises~~ where the ATM network further comprises:

a second policy server to:

identify a policy for the called party, the policy for the called party including a source address screening feature for defining a plurality of addresses from which said call can be initiated to said called party,

determine whether a policy condition associated with the source address screening feature is satisfied with respect to the signaling message, where, when determining whether the policy condition association with the source address screening feature is satisfied, the second policy server is to:

determine whether an address associated with the calling party is within the plurality of addresses, and

determine that the condition is satisfied for the source address screening feature when the address, associated with the calling party, is determined to be within the plurality of addresses, and

where the connection path is established based on whether the condition is satisfied for the source address screening feature.

26. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 25, ~~wherein~~ where said source address screening feature is established for a group of subscribers to which said called party belongs.

27. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 18, ~~wherein~~ where said ~~particular~~ one

or more policy feature features, identified by the policy for the calling party, comprises a maximum burst size limit feature for limiting a burst-size request associated with said call, and

where, when determining whether a policy condition associated with each policy feature is satisfied, the policy server is to:

determine whether a burst size in the signaling message exceeds a limit, and

determine that the condition is satisfied for the maximum burst size limit feature when the burst size does not exceed the limit.

28. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 27, ~~wherein~~ where said burst-size request comprises the number of packets per second allowed to be transmitted to said ATM network with respect to said call.

29. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 27, ~~wherein~~ where said burst-size request comprises the number of packets per second allowed to be received by said called party from said ATM network with respect to said call.

30. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 18, ~~wherein~~ where said ~~particular~~ one

or more policy feature features, identified by the policy for the calling party, comprises
an aggregate bandwidth limit feature for determining a maximum bandwidth allowable
for a particular network port authorized for use by said calling party, and

where, when determining whether a policy condition associated with each
policy feature is satisfied, the policy server is to:

calculate bandwidth for the signaling message,

determine whether calculated bandwidth exceeds a requested
bandwidth, and

determine that the condition is satisfied for the aggregate
bandwidth limit feature when the calculated bandwidth is determined to not exceed the
requested bandwidth.

31. (currently amended) The ATM network for effectuating intelligent policy
features with respect to a call as set forth in claim 18, ~~wherein~~ where said particular one
or more policy feature features, identified by the policy for the calling party, comprises a
service class selection feature for specifying a service class with respect to a network port
used by said party, and

where, when determining whether a policy condition associated with each
policy feature is satisfied, the policy server is to:

determine a requested class of service based on the signaling
message.

determine whether the requested class of service is permitted for a customer logical port with which the calling party is associated; and

determine that the condition is satisfied for the service class selection feature when the requested class of service is permitted for the customer logical port with which the calling party is associated.

32. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 31, ~~wherein~~ where said service class comprises a constant bit-rate (CBR) service.

33. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 31, ~~wherein~~ where said service class comprises a variable bit-rate (VBR) service.

34. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 33, ~~wherein~~ where said VBR service is a real-time VBR service.

35. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 33, ~~wherein~~ where said VBR service is a non-real-time VBR service.

36. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 31, ~~wherein~~ where said service class comprises an unspecified bit-rate (UBR) service.

37. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 31, ~~wherein~~ where said service class comprises an available bit-rate (ABR) service.

38. (currently amended) The ATM network for effectuating intelligent policy features with respect to a call as set forth in claim 18, ~~wherein~~ where said ~~particular one~~ or more policy feature features, identified by the policy for the calling party, comprises a maximum concurrent call limit feature for specifying the total number of calls allowed concurrently with respect to a network port used by said calling party, and
where, when determining whether a policy condition associated with each
policy feature is satisfied, the policy server is to:

determine whether a quantity of concurrent calls, if a call is
established between the calling party and the called party, exceeds a maximum number of
concurrent calls, and

determine that the condition is satisfied for the maximum
concurrent call limit feature when the quantity of concurrent calls does not exceed the
maximum number of concurrent calls.

39. (currently amended) A computer-readable medium operable with an Asynchronous Transfer Mode (ATM) network node, said computer-readable medium carrying a sequence of instructions provided for executing service logic which, when executed by a processing entity associated with said ATM network node, causes said ATM network node to perform a method comprising:

[[upon]] receiving, in said ATM network node, a signaling message with respect to a call from a calling party, the signaling message being received from an intercept processor propagating said signaling message to a policy server operably associated with said ATM network node;

identifying, in a policy profile database associated with the ATM network node and based on the signaling message, a policy for the calling party, the policy profile database storing entries that relate subscribers to policies, where each policy identifies one or more policy features, of a group of policy features, with which the related subscriber is associated;

executing, based on the signaling message, appropriate service logic for each policy feature of the one or more policy features identified by the policy for the calling party;

determining whether a policy condition associated with each policy feature, of the one or more policy features identified by the policy for the calling party, is satisfied with respect to said signaling message; and

upon determining that [[a]] the policy condition associated with a particular each policy feature, of the one or more policy features identified by the policy

for the calling party, to be invoked is satisfied with respect to said signaling message, effectuating a treatment for said call based on said particular policy feature, the particular policy feature including at least one of a destination address screening feature for a group of subscribers to which the party belongs or a source address screening feature for the group of subscribers causing a connection path to be established between the calling party and the called party.

40. (canceled)

41. (canceled)

42. (currently amended) The computer-readable medium operable with an ATM network node as set forth in claim 39, ~~wherein~~ where said signing message comprises a Connect message.

43. (currently amended) The computer-readable medium operable with an ATM network node as set forth in claim 39, ~~wherein~~ where said signing message comprises an Add Party message.

44. (currently amended) The computer-readable medium operable with an ATM network node as set forth in claim 39, ~~wherein~~ where said signing message comprises a Release message.

45. (currently amended) The computer-readable medium operable with an ATM network node as set forth in claim 39, ~~wherein~~ where said signing message comprises a Setup message.

46. (currently amended) The computer-readable medium operable with an ATM network node as set forth in claim 45, ~~wherein~~ where said ~~particular one or more~~ policy feature ~~features~~, identified by the policy for the calling party, comprises a source address validation feature for ensuring that said calling party is an authorized party for accessing said ATM network node through a particular network port associated ~~therewith~~ with the ATM network node, and

where the determining whether a policy condition associated with each policy feature is satisfied comprises:

determining whether an address associated with the calling party is within a range of authorized addresses, and

determining that the condition is satisfied for the source address validation feature when the address, associated with the calling party, is determined to be within the range of authorized addresses.

47. (currently amended) The computer-readable medium operable with an ATM network node as set forth in claim 46, ~~wherein~~ where said particular network port is a Customer Logical Port.

48. (currently amended) The computer-readable medium operable with an ATM network node as set forth in claim 46, ~~wherein~~ where said particular network port is a full physical port.

49. (currently amended) The computer-readable medium operable with an ATM network node as set forth in claim 45, ~~wherein~~ where said ~~particular one or more~~ policy feature ~~features, identified by the policy for the calling party, comprises a~~ features, identified by the policy for the calling party, comprises a maximum call attempt rate limit feature for monitoring the number of Setup messages received from said calling party over a predetermined period of time, and

where the determining whether a policy condition associated with each policy feature is satisfied comprises:

determining whether the signaling message results in a maximum call frequency rate for a customer logical port with which the calling party is associated,
and

determining that the condition is satisfied for the maximum call attempt rate limit feature when the signaling message does not result in the maximum call frequency rate for the customer logical port with which the calling party is associated.

50. (currently amended) The computer-readable medium operable with an ATM network node as set forth in claim 45, ~~wherein~~ where said ~~particular one or more~~

policy ~~feature~~ features, identified by the policy for the calling party, comprises [[the]] a destination address screening feature and the source address screening feature, and where the determining whether a policy condition associated with each policy feature is satisfied comprises:

determining whether an address associated with the called party is within a list of address ranges to which the calling party is allowed to call, and determining that the condition is satisfied for the destination address screening feature when the address, associated with the called party, is determined to be within the list of address ranges to which the calling party is allowed to call.

51-53. (canceled)

54. (currently amended) The computer-readable medium operable with an ATM network node as set forth in claim 45, ~~wherein~~ where said ~~particular one or more~~ policy ~~feature~~ features, identified by the policy for the calling party, comprises a maximum burst size limit feature for limiting a burst-size request associated with said call, and

where the determining whether a policy condition associated with each policy feature is satisfied comprises:

determining whether a burst size in the signaling message exceeds a limit, and

determining that the condition is satisfied for the maximum burst size limit feature when the burst size does not exceed the limit.

55. (currently amended) The computer-readable medium operable with an ATM network node as set forth in claim 54, ~~wherein~~ where said burst-size request comprises ~~the number~~ a quantity of packets per second allowed to be transmitted to said ATM network node with respect to said call.

56. (currently amended) The computer-readable medium operable with an ATM network node as set forth in claim 54, ~~wherein~~ where said burst-size request comprises ~~the number~~ a quantity of packets per second allowed to be received by said calling party from said ATM network node with respect to said call.

57. (currently amended) The computer-readable medium operable with an ATM network node as set forth in claim 45, ~~wherein~~ where said ~~particular one or more policy feature~~ features, identified by the policy for the calling party, comprises an aggregate bandwidth limit feature for determining a maximum bandwidth allowable for a particular network port authorized for use by said calling party, and
where the determining whether a policy condition associated with each policy feature is satisfied comprises:

calculating bandwidth for the signaling message,

determining whether calculated bandwidth exceeds a requested
bandwidth, and

determining that the condition is satisfied for the aggregate
bandwidth limit feature when the calculated bandwidth is determined to not exceed the
requested bandwidth.

58. (currently amended) The computer-readable medium operable with an
ATM network node as set forth in claim 45, ~~wherein~~ where said ~~particular one or more~~
policy ~~feature~~ features, identified by the policy for the calling party, comprises a service
class selection feature for specifying a service class with respect to a particular network
port used by said calling party, and

where the determining whether a policy condition associated with each
policy feature is satisfied comprises:

determining a requested class of service based on the signaling
message,

determining whether the requested class of service is permitted for
a customer logical port with which the calling party is associated; and

determining that the condition is satisfied for the service class
selection feature when the requested class of service is permitted for the customer logical
port with which the calling party is associated.

59. (currently amended) The computer-readable medium operable with an ATM network node as set forth in claim 58, ~~wherein~~ where said service class comprises a constant bit-rate (CBR) service.

60. (currently amended) The computer-readable medium operable with an ATM network node as set forth in claim 58, ~~wherein~~ where said service class comprises a variable bit-rate (VBR) service.

61. (currently amended) The computer-readable medium operable with an ATM network node as set forth in claim 60, ~~wherein~~ where said VBR service is a real-time VBR service.

62. (currently amended) The computer-readable medium operable with an ATM network node as set forth in claim 60, ~~wherein~~ where said VBR service is a non-real-time VBR service.

63. (currently amended) The computer-readable medium operable with an ATM network node as set forth in claim 58, ~~wherein~~ where said service class comprises an unspecified bit-rate (UBR) service.

64. (currently amended) The computer-readable medium operable with an ATM network node as set forth in claim 58, ~~wherein~~ where said service class comprises an available bit-rate (ABR) service.

65. (currently amended) The computer-readable medium operable with an ATM network node as set forth in claim 45, ~~wherein~~ where said ~~particular one or more~~ policy feature features, identified by the policy for the calling party, comprises a maximum concurrent call limit feature for specifying the total number of calls allowed concurrently with respect to a particular network port used by said calling party, and
where the determining whether a policy condition associated with each
policy feature is satisfied comprises:
determining whether a quantity of concurrent calls, if a call is
established between the calling party and the called party, exceeds a maximum number of
concurrent calls, and
determining that the condition is satisfied for the maximum
concurrent call limit feature when the quantity of concurrent calls does not exceed the
maximum number of concurrent calls.

66. (withdrawn) A memory structure for storing data usable in effectuating intelligent policy features in an Asynchronous Transfer Mode (ATM) network wherein said memory structure is operable with a processing entity associated with a policy server node disposed in said ATM network, comprising:

a data structure having a list of subscribers wherein said subscribers are authorized to access said ATM network to setup virtual channel connections for service;

each of said subscribers having an ATM address and a Customer Logical Port (CLP) ID associated therewith; and

a profile array associated with said subscribers wherein a policy feature record is populated for each subscriber with at least one policy feature which indicates a specific treatment for a call to be effectuated relative to said each subscriber.

67. (withdrawn) The memory structure for storing data usable in effectuating intelligent policy features in an ATM network as set forth in claim 66, wherein said at least one policy feature is selected from the group consisting of: a source address validation feature, a maximum call attempt rate limit feature, a destination address screening feature, a source address screening feature, a maximum burst size limit feature, an aggregate bandwidth limit feature, a service class selection feature, and a maximum concurrent call limit feature.

68. (withdrawn) The memory structure for storing data usable in effectuating intelligent policy features in an ATM network as set forth in claim 67, wherein said virtual channel connections comprise switched connections.

69. (withdrawn) The memory structure for storing data usable in effectuating intelligent policy features in an ATM network as set forth in claim 68, wherein said at

least one policy feature is invoked by a trigger received in a signaling message transmitted with respect to said call.

70. (withdrawn) The memory structure for storing data usable in effectuating intelligent policy features in an ATM network as set forth in claim 69, wherein said signaling message comprises a Connect message.

71. (withdrawn) The memory structure for storing data usable in effectuating intelligent policy features in an ATM network as set forth in claim 69, wherein said signaling message comprises an Add Party message.

72. (withdrawn) The memory structure for storing data usable in effectuating intelligent policy features in an ATM network as set forth in claim 69, wherein said signaling message comprises a Release message.

73. (withdrawn) The memory structure for storing data usable in effectuating intelligent policy features in an ATM network as set forth in claim 69, wherein said signaling message comprises a Setup message.

74. (withdrawn) A source address validation method operable in an Asynchronous Transfer Mode (ATM) network, comprising the steps of:

assigning a port ID to a Customer Logical Port (CLP) served by an ATM node disposed in said network;

associating a customer ID with said CLP wherein a plurality of addresses specified for said customer ID are authorized for use with said CLP;

upon receiving in said ATM node a signaling message from a user operating a customer premises equipment (CPE) through said CLP, determining if said CPE's address belongs to said plurality of addresses authorized for said CLP; and

if so, establishing a virtual channel connection through said ATM network for said user.

75. (withdrawn) A method of restricting call connection attempts by a user in an Asynchronous Transfer Mode (ATM) network, comprising the steps of:

specifying a limit on the number of call setup requests received over a predetermined period at a Customer Logical Port (CLP) served by an ATM node disposed in said network;

receiving in said ATM node a signaling message from said user operating a customer premises equipment (CPE) through said CLP;

determining if said limit on the number of call setup requests is exceeded by said signaling message in said predetermined period; and

if said limit on the number of call setup requests is not exceeded by said signaling message in said predetermined period, establishing a virtual channel connection through said ATM network for said user.

76. (withdrawn) A method of screening destination addresses in an Asynchronous Transfer Mode (ATM) network, comprising the steps of:

- defining a positive list of addresses to which a user is allowed to make call connections;
- defining a negative list addresses to which said user is not allowed to make call connections;
- receiving in an ATM node a signaling message from said user operating a customer premises equipment (CPE) through a Customer Logical Port served by said ATM node, said signaling message for attempting to setup a call connection to a called party;
- determining if said called party's address belongs to said positive list of addresses; and
- if so, establishing said call connection through said ATM network for said user.

77. (withdrawn) A method of screening source addresses in an Asynchronous Transfer Mode (ATM) network, comprising the steps of:

- defining a positive list of addresses from which call connections are allowed to terminate to a user;
- defining a negative list addresses from which call connections are not allowed to terminate to said user;

receiving in an ATM node a signaling message from a calling party operating a customer premises equipment (CPE) through a Customer Logical Port served by said ATM node, said signaling message for attempting to setup a call connection to said user;

determining if said calling party's address belongs to said positive list of addresses; and

if so, establishing said call connection through said ATM network for said user.

78. (withdrawn) A method of restricting burst-size requests received for call connections in an Asynchronous Transfer Mode (ATM) network, comprising the steps of:

defining a forward burst-size limit allowed for an individual call connection established through a Customer Logical Port served by an ATM node disposed in said network;

defining a backward burst-size limit allowed for said individual call connection established through said CLP;

receiving in said ATM node via said CLP a signaling message from a user with respect to a particular call connection, said signaling message including at least one of a forward burst-size request and a backward burst-size request;

determining if at least one of said forward burst-size request and said backward burst-size request exceeds said corresponding burst-size limit;

if so, denying said particular call connection through said ATM network
for said user.

79. (withdrawn) A class-of-service provisioning method for call connections
in an Asynchronous Transfer Mode (ATM) network, comprising the steps of:

configuring a plurality of service classes for a Customer Logical Port
served by an ATM node disposed in said network;

receiving in said ATM node via said CLP a signaling message from a user
with respect to a particular call connection, said signaling message including a class-of-
service request;

determining if said class-of-service request is allowed for said CLP;

if so, establishing said call connection through said ATM network for said
user.

80. (withdrawn) A method of restricting the number of concurrent active call
connections in an Asynchronous Transfer Mode (ATM) network, comprising the steps of:

defining a concurrent call limit allowed for a Customer Logical Port
served by an ATM node disposed in said network;

receiving in said ATM node via said CLP a signaling message from a user
with respect to a particular call connection;

determining if said concurrent call limit for said CLP would be exceeded
by said signaling message;

if so, denying said particular call connection through said ATM network for said user.

81. (withdrawn) A bandwidth control method operable in an Asynchronous Transfer Mode (ATM) network, comprising the steps of:

specifying a total forward bandwidth allocated for a Customer Logical Port (CLP) served by an ATM node disposed in said network;

specifying a total backward bandwidth allocated for said CLP;

receiving in said ATM node via said CLP a signaling message from a user with respect to a particular call connection, said signaling message including at least one of a service class request and a plurality of bandwidth parameters;

calculating at least one of a forward bandwidth request and a backward bandwidth request corresponding to said particular call connection;

applying an overbooking factor to at least of said forward bandwidth request and said backward bandwidth request calculated for said particular call connection, thereby-generating an adjusted forward bandwidth request and an adjusted backward bandwidth request;

computing a remaining bandwidth after accounting for bandwidth in use in each direction;

comparing said adjusted forward bandwidth request and said adjusted backward bandwidth request to said remaining bandwidth in each direction; and

if said adjusted forward and backward bandwidth requests exceed said remaining bandwidth in each direction, establishing said particular call connection through said ATM network for said user.